## Workforce development

What jobs are available today?

Which career fields are projected to grow fastest in the next five to 10 years?

How will the working-age population change?





## Top five fields for Bachelor's degree or higher

			Projected Average Annual Total Openings		
Field	Average Annual Wage	2006 Job Vacancies	2005Q2- 2007Q2	2005- 2009	2010- 2014
Business and Management	\$79,916	6,475	7,536	6,997	6,651
Educators	\$46,788	2,249	5,166	4,749	5,816
Computer Science	\$77,958	3,720	3,816	3,554	3,576
Engineering/software/architecture	\$73,694	2,578	3,367	2,886	1,940
Medical Professionals	\$99,051	1,881	1,506	1,498	1,559



**Data note:** Some occupational fields appear in more than one table because specific jobs within those fields require different levels of education and training.

**Source:** Employment Security Department



# Top five fields for AA degree, post-secondary training, or long-term on-the-job training

			Projected Average Annu Total Openings		
Field	Average Annual Wage	2006 Job Vacancies	2005Q2- 2007Q2	2005- 2009	2010- 2014
Agriculture and Trades	\$48,452	4,633	11,468	10,751	9,279
Medical Professionals	\$48,230	8,478	4,609	4,635	4,898
Sales and Service Occupations	\$40,751	2,911	5,784	5,847	5,135
Business and Management	\$70,137	1,174	2,089	1,915	1,829
Administrative/clerical/legal	\$43,096	926	1,986	1,996	2,025



**Data note:** Some occupational fields appear in more than one table because specific jobs within those fields require different levels of education and training.

**Source:** Employment Security Department



## Top five fields for short-term preparation

			Projected Average Annual Total Openings		
Field	Average Annual Wage	2006 Job Vacancies	2005Q2- 2007Q2	2005- 2009	2010- 2014
Sales and Service Occupations	\$25,124	16,589	38,194	37,255	27,151
Agriculture and Trades	\$32,221	13,661	19,591	19,766	17,363
Administrative/clerical/legal	\$31,163	7,390	17,764	17,932	15,715
Human/protective service professionals	\$29,629	873	2,240	2,324	1,668
Medical Professionals	\$28,573	1,011	1,791	1,779	1,768

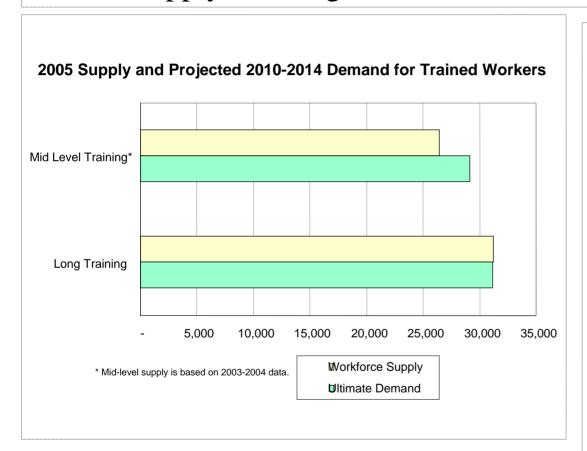


**Data notes:** Short-term preparation is high school, General Educational Development (GED), or less. Some occupational fields appear in more than one table because specific jobs within those fields require different levels of education and training.

Source: Employment Security Department

## Higher Education Coordinating Board

## Current supply and long-term demand for trained workers



#### **Employer Needs**

For positions requiring mid-level the aggregate production of prepared workers falls short of employer demand.

At the long preparation level aggregate data appears to indicate parity between supply and demand however, we believe based on other evidence that the aggregate demand underestimates actual employer demand.

## Key limitations of an aggregate analysis include:

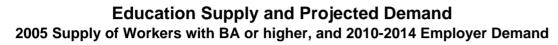
- Masking differences by occupation.
- net in-migration of high wage educated trained workers.
- low unemployment of workers with a bachelor's or higher.

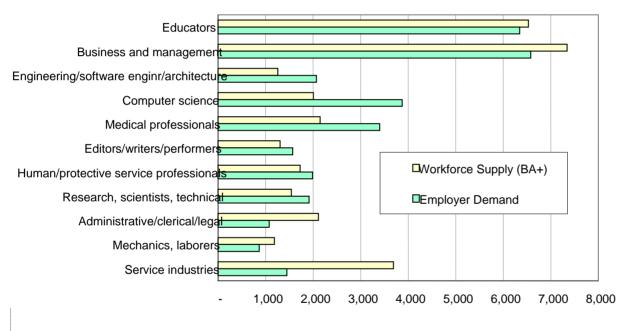


**Data notes:** 2004-05 Supply and 2010-2014 employer demand. Estimates of ed level associated with occupation based upon distribution of education levels in 2005 State and Regional Needs Assessment. Mid Level Supply is 2003-2004, does not include students who leave the Baccalaureate sector with "some college".

### Higher Education Coordinating Board

## 2005 supply and 2010-2014 demand in selected career fields





**Data notes:** 2004-05 Supply and 2010-2014 employer demand. Estimates of education level associated with occupation based upon distribution of education levels in 2005 State and Regional Needs Assessment.



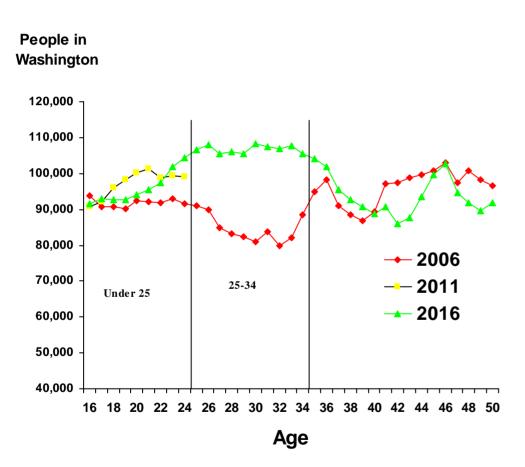
#### **Employer Needs**

Current degree production only meets:

- 52 percent of the need in computer science.
- 61 percent of the need in engineering, software engineering, and architecture
- 63 percent of the need for additional training in the medical professions,
- 81 percent of the need in research, scientific, and technical occupations
- 83 percent of the need in editing, writing and performing occupations.
- 87 percent protective service occupations.



# Washington's workforce will increasingly consist of workers who are under-educated for knowledge economy jobs



#### **Analysis**

- The greatest population growth in the next 10 years will be among older working adults predominantly 25-34 years old.
- This large and growing working age population 25-44 years old includes over one-third with no education beyond high school or no high school diploma, and is equal to the next 10 high school graduating classes.
- Population growth in the next 5 years is also large for 18-24 year olds. One-fourth of 18-24 year olds have not completed high school.



**Source:** SBCTC from OFM November 2005 population forecast.